



SY3120



SY3220



SY5220



SY7120

◆ Specifications

Series		SY3000	SY5000	SY7000
Fluid		Air		
Internal pilot	2 position single	0.15~0.7 MPa		
Operating pressure range	2 position double	0.1~0.7 MPa		
	3 position	0.2~0.7 MPa		
Ambient and fluid temperature		-10~50°C (No freezing)		
Max. operating frequency	2 position single, double	10 Hz	5 Hz	5 Hz
	3 position	3 Hz	3 Hz	3 Hz
Manual override(Manual operation)		Non-locking push type		
Pilot exhaust method		Common exhaust type for main and pilot valve		
Lubrication		Not required		
Mounting orientation		Unrestricted		
Impact/Vibration resistance		150/30 (m/s ²)		
Enclosure		Dustproof		

◆ Solenoid Specifications

Electrical entry		L plug connector(L)	
Coil rated voltage(V)	DC	24, 12	
	AC 50/60Hz	110, 220	
Allowable voltage fluctuation(%)		± 10% of rated voltage	
Power consumption	DC	Standard	
	AC	110V	1.6VA (With indicator light: 1.7)
Apparent power	AC	220V	2.5VA (With indicator light: 2.6)
	Indicator light		LED

◆ Response Time

Series	Type of actuation	Response time (at the pressure of 0.5MPa)	
		Without light/surge voltage suppressor	With light/surge voltage suppressor Type S, Z
SY3000	2 position single	12ms or less	15ms or less
	2 position double	10ms or less	13ms or less
	3 position	15ms or less	20ms or less
SY5000	2 position single	19ms or less	26ms or less
	2 position double	18ms or less	22ms or less
	3 position	32ms or less	38ms or less
SY7000	2 position single	31ms or less	38ms or less
	2 position double	27ms or less	30ms or less
	3 position	50ms or less	56ms or less

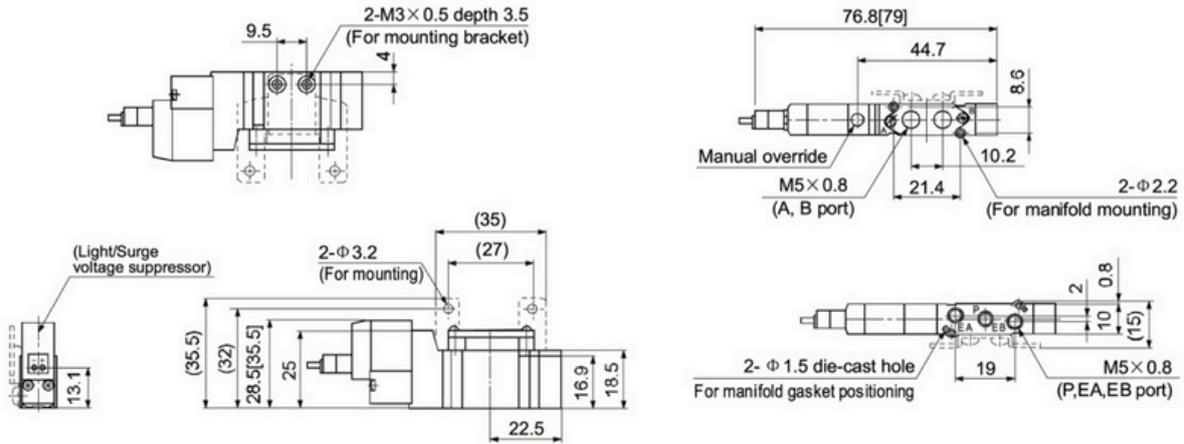
◆ Flow Characteristics/Weight

Valve model	Type of actuation		Port size		Flow characteristics						Weight(g)
			1,5,3 (P,EA,EB)	4,2 (A,B)	1→4/2(P→A/B)			4/2→5/3(A/B→EA/EB)			
					C(kdm ³ /s·bar)	b	Cv	C(kdm ³ /s·bar)	b	Cv	
SY3□20-□-M5	2 position	Single	M5×0.8	M5×0.8	0.61	0.44	0.16	0.64	0.45	0.18	53
		Double									74
	3 position	Closed center			0.48	0.46	0.13	0.47	0.43	0.13	76
		Exhaust center									
3 position	Pressure center	0.47	0.42	0.13	0.47 (0.44)	0.41 (0.37)	0.13 (0.12)				
	Exhaust center										
SY5□20-□-01	2 position	Single	1/8	1/8	1.9	0.35	0.49	2.4	0.39	0.61	72
		Double									93
	3 position	Closed center			1.7	0.43	0.45	1.8	0.35	0.46	98
		Exhaust center									
3 position	Pressure center	1.5	0.44	0.41	2.5 (1.5)	0.32 (0.43)	0.59 (0.40)				
	Exhaust center										
SY7□20-□-02	2 position	Single	1(P) Port 1/4	1/4	4.1	0.23	0.93	3.3	0.33	0.81	104
		Double									125
	3 position	Closed center			2.9	0.31	0.70	2.4	0.38	0.63	133
		Exhaust center									
3 position	Pressure center	2.5	0.39	0.65	3.4 (2.1)	0.35 (0.38)	0.82 (0.54)				
	Pressure center										
3 position	Pressure center	4.3 (2.4)	0.23 (0.32)	0.97 (0.61)	2.2	0.39	0.59				

◆ **Dimensions**

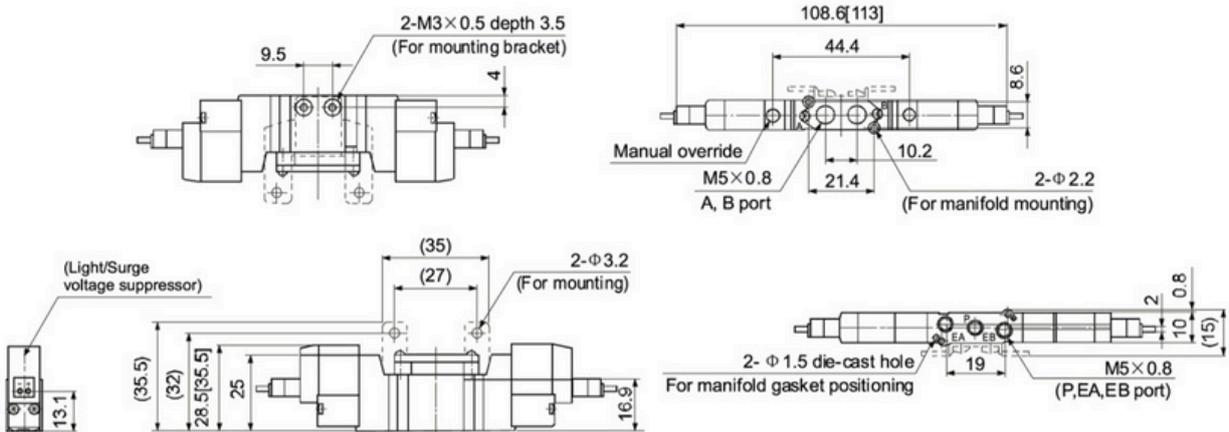
2 position single

L plug connector(L):SY3120-□L□□-M5(-F2)



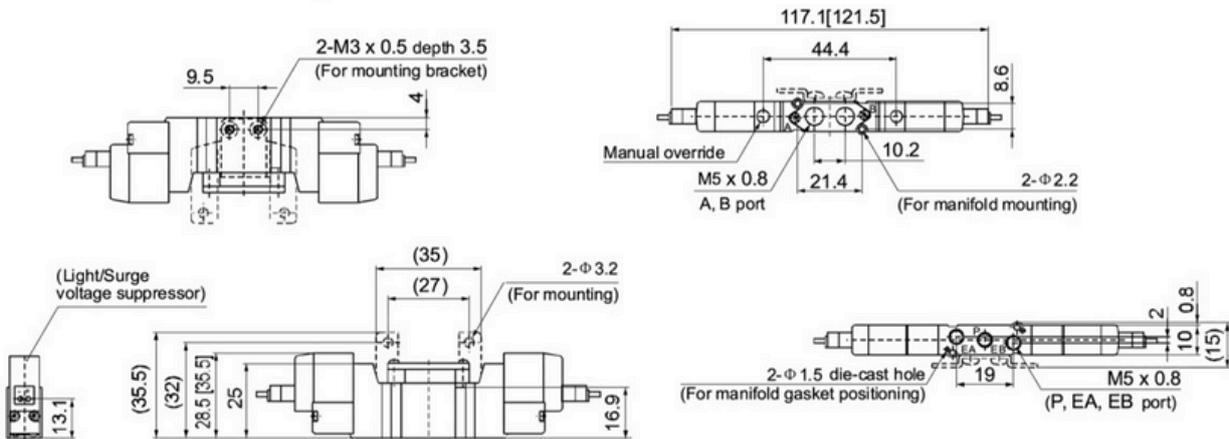
2 position double

L plug connector(L):SY3220-□L□□-M5(-F2)



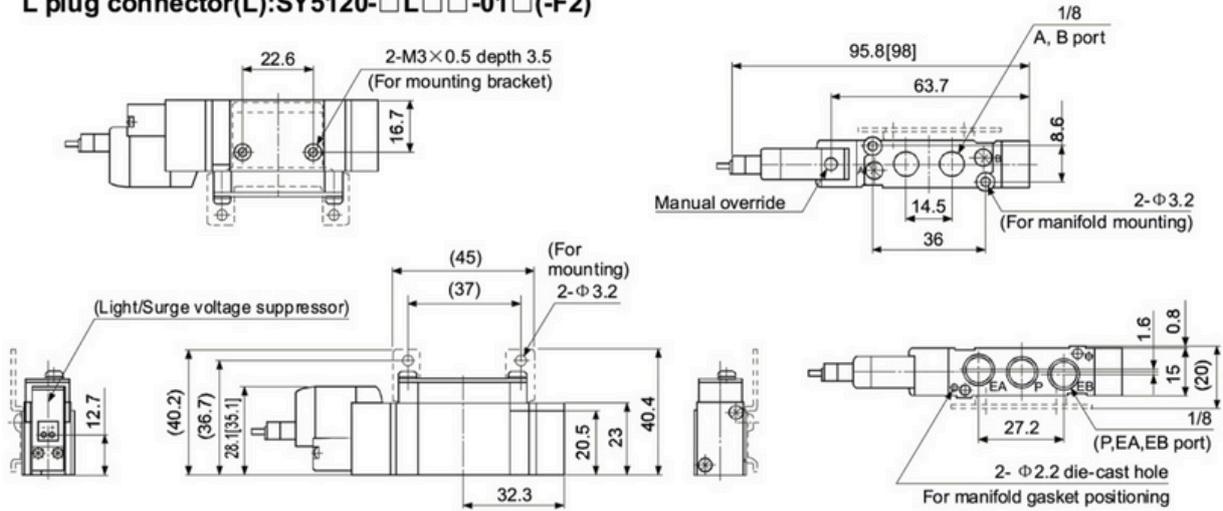
3 position closed center/exhaust center/pressure center

L plug connector(L):SY3 3/4 20-□L□□-M5(-F2)



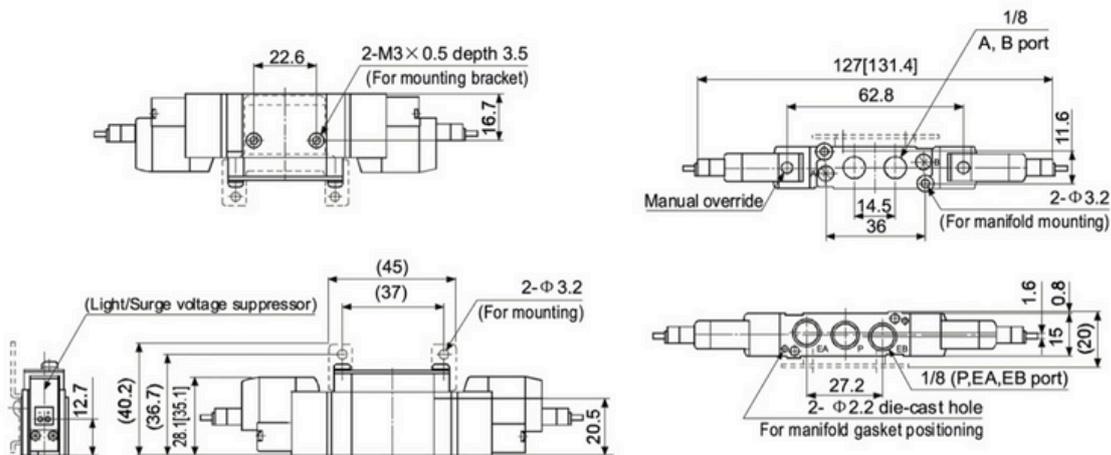
2 position single

L plug connector(L):SY5120-□L□□-01□(-F2)



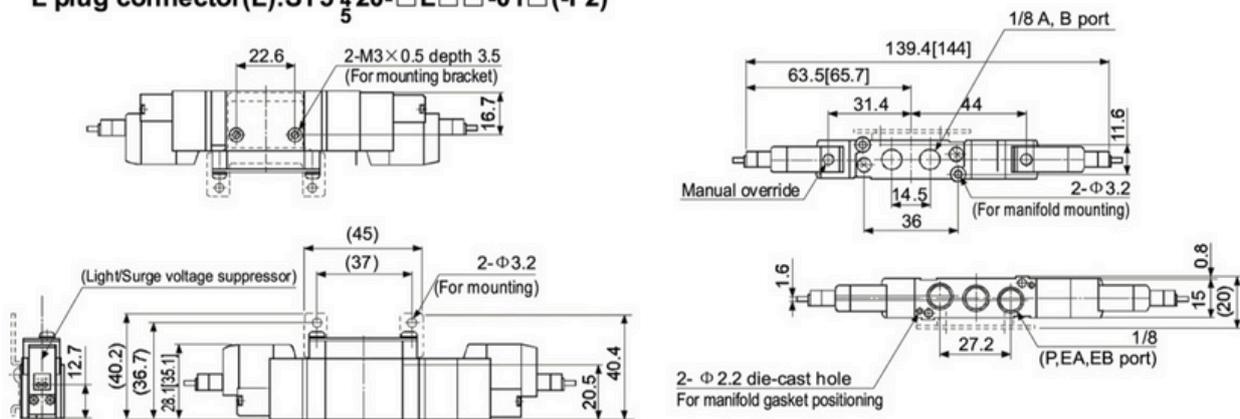
2 position double

L plug connector(L):SY5220-□L□□-01□(-F2)



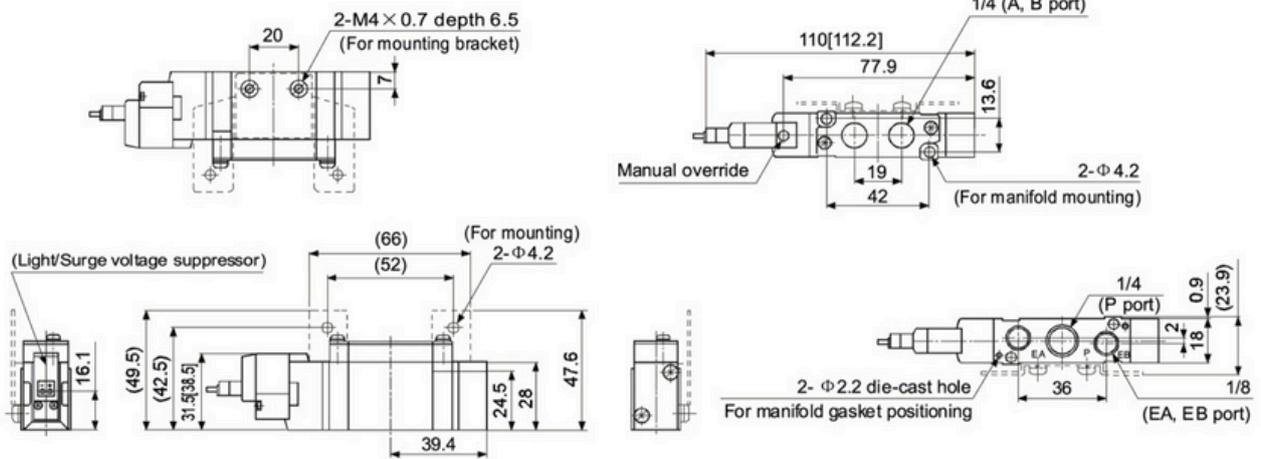
3 position closed center/exhaust center/pressure center

L plug connector(L):SY5³/₄20-□L□□-01□(-F2)



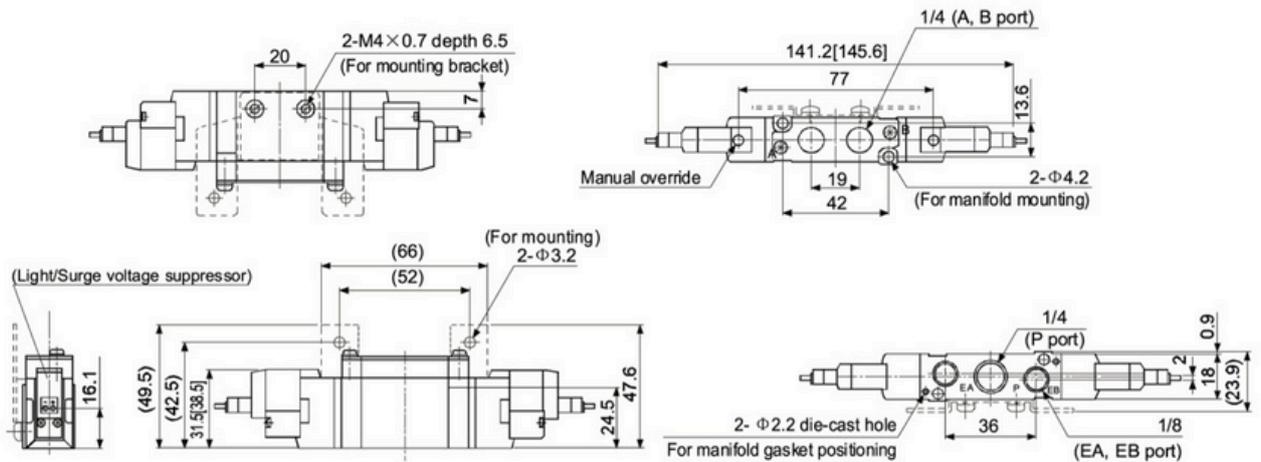
2 position single

L plug connector(L):SY7120-□L□□-02□(-F2)



2 position double

L plug connector(L):SY7220-□L□□-02□(-F2)



3 position closed center/exhaust center/pressure center

L plug connector(L):SY7220-□L□□-02□(-F2)

